

# FLORIDA SOLAR ENERGY CENTER

1679 CLEARLAKE ROAD, COCOA, FLORIDA 32922-5703 (321) 638-1000



## Approved Solar Energy System

FSEC # S4055

Approval Date: APR 1984

Revision Date: JAN 2004

DISTRIBUTOR	SYSTEM
Thermal Conversion Technology 101 Copeland Street Jacksonville, Florida 32204	ProgressivTube PT-40-CN (2)

This system was evaluated by the Florida Solar Energy Center (FSEC) in accordance with the Florida Standards Program For Solar Domestic Water and Pool Heating Systems (FSEC-GP-7-80) and was found to meet the minimum standards established by FSEC.

The calculated Florida Energy Factors for this system are:

	<b>North</b>	<b>South/Central</b>
	Greater than 15	Greater than 15

### Description

Collector Manufacturer	Model Number	Units	Total Rating (Btu)
1. Thermal Conversion Tech.	PT-40-CN	2	56,900*

\*  $Q_{NET}$  based on FSEC Solar System Test  
Rating valid only for units plumbed in parallel

Tank Manufacturer	Model Number	Capacity (gal)	Type: Direct
1. Integral Storage		82	

Pump Manufacturer	Model Number	Power Draw (Watts)	Rated Power
1. None			

Controller Manufacturer	Model Number	Type:
1. None		

#### Freeze Protection

1. Thermal mass
2. Manual draining

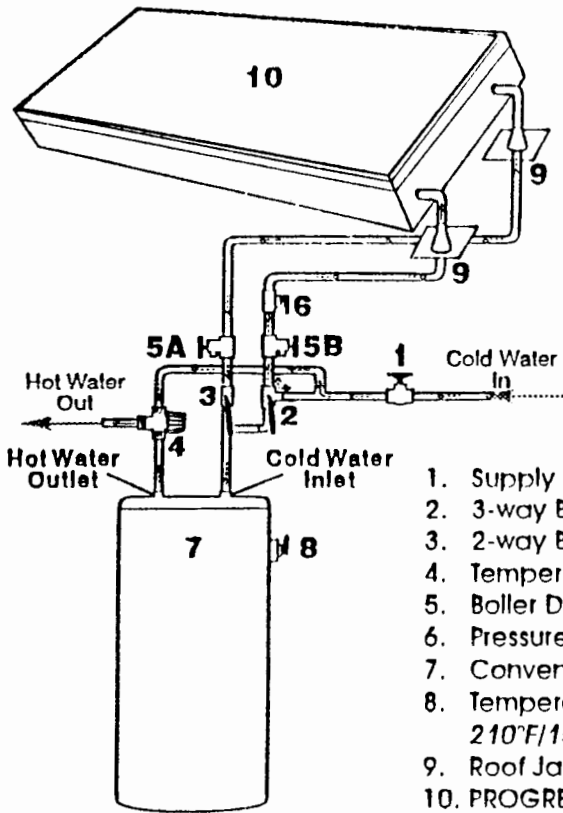
#### Other Major Components

1. None

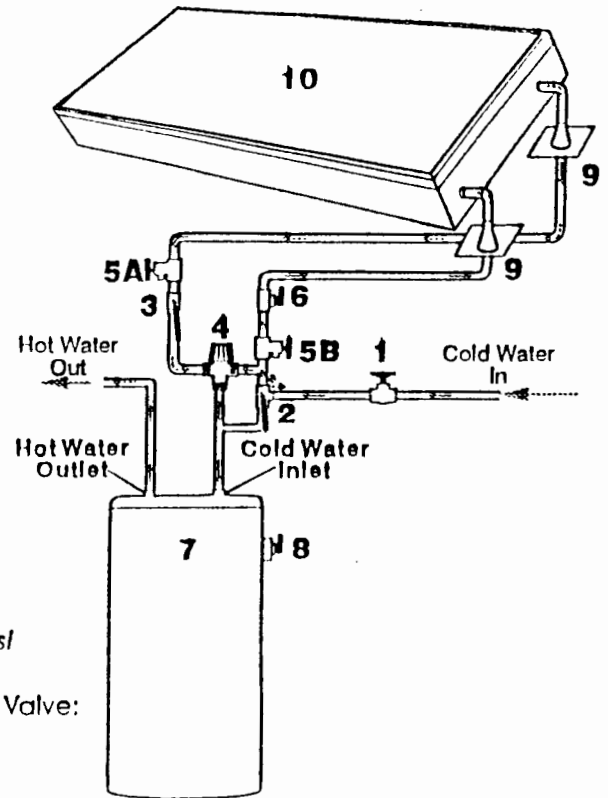
If further information is required you may contact the Florida Solar Energy Center at the above address.

# SYSTEM PLUMBING DIAGRAMS

## PRE-HEATER SOLAR SYSTEMS



2-WAY SYSTEM  
FOR ELECTRIC WATER HEATERS



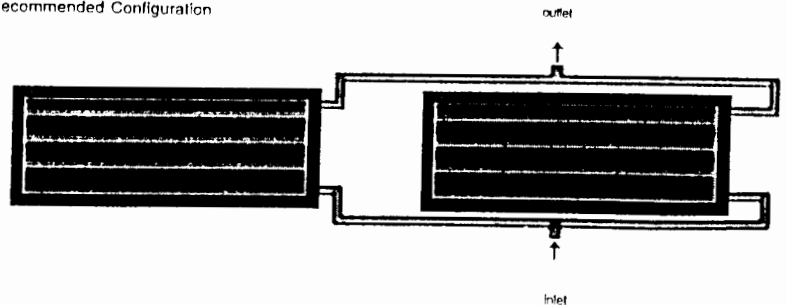
2-WAY SYSTEM  
FOR GAS WATER HEATERS

1. Supply shut off valve
2. 3-way Ball Valve: *Bronze*
3. 2-way Ball Valve: *Bronze*
4. Tempering Valve
5. Boiler Drains: *Bronze*
6. Pressure Relief Valve: *150 psi*
7. Conventional Water Heater
8. Temperature/Pressure Relief Valve: *210°F/150 psi*
9. Roof Jacks
10. PROGRESSIVTUBE®

### Two Unit System Piped in Parallel

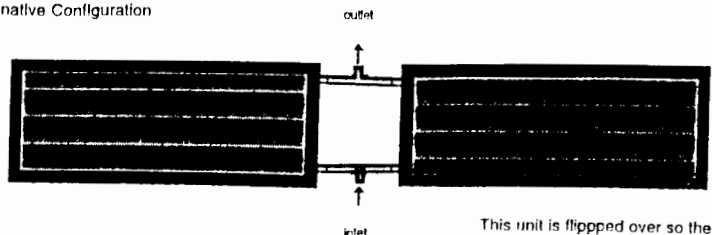
The collectors in two unit systems **MUST** be piped in parallel as shown in either of these drawings

Recommended Configuration



Caution: pipe between units must be of equal length between inlet and outlet fittings.

Alternative Configuration



This unit is flipped over so the outlet becomes the inlet and the inlet becomes the outlet.